MIOSHA Fact Sheet

Pinch Points

What are "pinch points?"

A pinch point is any point at which it is possible for a person or part of a person's body to be caught between moving parts of a machine, or between the moving and stationary parts of a machine, or between material and any part of the machine. A pinch point does not have to cause injury to a limb or body part, although it might cause injury – it only has to trap or pinch the person to prevent them from escaping or removing the trapped part from the pinch point.

How are "pinch points" different from points of operation?

Pinch points are distinguished from points of operation mainly by definition, but points of operation can be, and often are pinch points. Pinch points generally occur exclusive of a point of operation (where some form of work is taking place.)

What machines have "pinch points?"

Pinch points can be quite pervasive in a business and include, but are not limited to, such machines as metal-forming machines, power presses, conveyors, robotic machines, powered rollers, assembling machines, plastic molding machinery, printing presses, powered benders, press brakes, power transmission equipment, powered doors, covers, and hatches, including such generally un-recognized hazards like overhead, powered garage-type of sliding doors. (They create a pinch point between the moving door and the floor or door frame that can strike or trap unwary people standing beneath or walking through them!)

Are there MIOSHA standards that cover these different "pinch points?"

Yes. MIOSHA recognized pinch points in a number of standards to protect employees. The term pinch point may or may not be used to describe machines and conditions that need guarding to prevent injuries.

These are the **Michigan Occupational Safety Standards** that contain language about pinch points, or require some form of guarding to protect exposed employees.

Click on each hyperlink to quickly access each specific standard on the MIOSHA website.

- Act 154, Michigan Occupational Safety and Health Act, General Duty Clause
- Part 1, General Provisions
- Part 14, Conveyors
- Part 17, Refuse Packer Units
- Part 21, Powered Industrial Trucks
- Part 22, Tractors
- Part 23, Hydraulic Power Presses
- Part 24, Mechanical Power Presses
- Part 26, Metalworking Machinery
- Part 49, Slings
- Part 62, Plastic Molding
- Part 63, Pulp, Paper, and Paperboard Mills
- Part 71, Laundry and Dry Cleaning Machinery and Operations
- Part 72, Automotive Service Operations
- Part 81, Baking Operations





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What can employers do to protect employees?

The major thing employers can do, and are required to do, is make a careful evaluation of the machines and operations within their workplaces to identify pinch points. After identifying them, the next step is to eliminate or guard the pinch points to prevent employee contact with the pinch points. After eliminating or guarding the pinch points, an employer must train all of the employees about the reasons for the guarding and the hazards created by the pinch points and what injury a pinch point might cause.

- Guards are specifically intended to create a physical barrier to prevent anyone from reaching into, through, over, under, or around the guard to make contact with, or at, the pinch point.
- Training is required to teach the employees what the guards are designed to do and the reason for the protective barrier, and to instruct the employees not to tamper, modify, circumvent, or remove the guards EXCEPT under very specific cases when repair work might be necessary by trained and qualified employees.

Are employees required to do anything about "pinch points?"

Yes. Employees have a specific duty not to remove, displace, damage, destroy, carry off, tamper, modify, or interfere with any guarding or employees utilizing guarding placed upon machinery by their employer of manufacturer unless they have been especially trained, instructed, and designated by their employer and understand, know, and utilize alternative forms of protection while repairing, trouble-shooting, servicing, or lubricating any machinery.

If any employee discovers an un-guarded pinch point, they need to report the hazard to their supervisor or employer immediately.